CLAIMS

What is claimed is:

5   1. In an electronic device, a method of reverting a computer-aided design (CAD) modeled object back to a prior state in a design process to enable the creation of alternate design paths, comprising:

    providing a modeled object in a current state;

    activating a rollback function to provide a user with a representation of the

10 modeled object in the prior state without deleting or altering the current state; and

    modifying the modeled object in the prior state to result in a first alternate current state;

    wherein the current state remains accessible by the user.

15 2. The method of claim 1, further comprising activating the rollback function to provide the user with a representation of the modeled object in the prior state without deleting or altering the current state or the first alternate current state.

3. The method of claim 2, further comprising modifying the modeled object in the prior

20 state to result in a second alternate current state.

4. The method of claim 1, wherein modifying comprises altering a feature that existed in the modeled object.

25 5. The method of claim 1, wherein providing the modeled object comprises providing a representation of the modeled object including feature information and feature history.

6. The method of claim 1, wherein providing the modeled object comprises creating a representation of the modeled object with at least one feature.

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7. The method of claim 1, wherein activating the rollback function comprises selecting the rollback function with a user input device.

8. The method of claim 1, wherein modifying comprises activating a redo function to reverse a previous undo function.

5 9. The method of claim 1, further comprising inserting a plurality of time state indicator stops between modifications of the modeled object.

10. The method of claim 1, further comprising utilizing a rollforward function to return to a state from which the rollback function was activated.

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11. In an electronic device, a method of manipulating a computer aided design (CAD) modeled object, comprising:

    providing a modeled object in a current state; and

    activating a rollback function to provide a user with a representation of the

15 modeled object in a prior state without deleting or altering the current state;

    wherein the current state remains accessible and updatable.

12. The method of claim 11, further comprising modifying the modeled object in the prior state to result in an updatable first alternate current state.

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13. The method of claim 11, further comprising activating the rollback function to provide the user with a representation of the modeled object in the prior state without deleting or altering the current state or the first alternate current state.

25 14. The method of claim 13, further comprising modifying the modeled object in the prior state to result in a second alternate current state.

15. The method of claim 11, further comprising activating an undo function to revert to a previous state of the modeled object.

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16. The method of claim 11, wherein providing the modeled object comprises providing a representation of the modeled object including feature information and feature history.

17. The method of claim 11, wherein providing the modeled object comprises creating a representation of the modeled object with at least one feature.

5   18. The method of claim 11, wherein activating the rollback function comprises selecting the rollback function with a user input device.

19. The method of claim 11, further comprising utilizing a rollforward function to return to a state from which the rollback function was activated.

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20. The method of claim 11, wherein modifying comprises activating a redo function to replace a previous undo function.

21. The method of claim 11, further comprising inserting a plurality of time state
15 indicator stops between modifications of the modeled object.

22. A computer readable medium containing software suitable for executing a method of reverting a CAD modeled object back to a prior state in a design process to enable the creation of alternate design paths, the method comprising:
20   providing a modeled object in a current state;
         activating a rollback function to provide a user with a representation of the modeled object in the prior state without deleting or altering the current state; and
         modifying the modeled object in the prior state to result in a first alternate current state;
25   wherein the current state remains accessible by the user.

23. A computer readable medium containing software suitable for executing a method of manipulating a CAD modeled object, comprising:
         providing a modeled object in a current state; and
30   activating a rollback function to provide a user with a representation of the modeled object in a prior state without deleting or altering the current state;
         wherein the current state remains accessible and updatable.